State of California
AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking,
Including Summary of Comments and Agency Response

PUBLIC HEARING TO CONSIDER ADOPTION OF REGULATION FOR STATE IMPLEMENTATION PLAN CREDIT FROM MOBILE AGRICULTURAL EQUIPMENT

Public Hearing Date: October 25, 2013
Agenda Item No.: 13-9-7

I. GENERAL

A. The Staff Report: Initial Statement of Reasons for Rulemaking (Staff Report), Proposed Regulation for "State Implementation Plan Credit from Mobile Agricultural Equipment" released September 4, 2013, is incorporated by reference herein. The Staff Report contained a description of the rationale for the proposed regulation. On September 4, 2013, all references relied upon and identified in the staff report were made available to the public.

On October 25, 2013, at a public hearing the Air Resources Board (ARB or Board) approved for adoption the proposed regulation for "State Implementation Plan Credit from Mobile Agricultural Equipment", Article 4.1, Section 2428, Title 13, California Code of Regulations. The regulation provides an administrative mechanism to ensure investments made by the public sector and by the agricultural industry in the San Joaquin Valley through incentive funded projects implemented using Carl Moyer Program Guidelines result in emission reductions that are eligible for State Implementation Plan (SIP) credit. Using Carl Moyer Program Guidelines ensures that these programs produce emission reductions that are surplus, quantifiable, enforceable, and permanent, and meet United States Environmental Protection Agency (U.S. EPA) guidance for SIP creditability of incentive funded projects.

B. MANDATES AND FISCAL IMPACTS TO LOCAL GOVERNMENTS AND SCHOOL DISTRICTS

The Board has determined that this regulatory action will not result in a mandate to any local agency or school district, the costs of which are reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

C. CONSIDERATION OF ALTERNATIVES

For the reasons set forth in the Notice of proposed rulemaking released on September 4, 2013, the Staff Report, staff's presentation and responses at

the hearing, and in this Final Statement of Reasons, the Board determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed, or would be as effective as and less burdensome to affected private persons, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law than the action taken by the Board.

II. MODIFICATIONS MADE TO THE ORIGINAL PROPOSAL

A. MODIFICATIONS APPROVED AT THE BOARD HEARING AND PROVIDED FOR IN THE 15-DAY COMMENT PERIOD

During the 45-day public comment period, U.S. EPA provided 2 comments regarding the proposed regulation. The first comment was with regard to the opt-in provision for other air pollution control or air quality management districts (air districts). U.S. EPA was concerned that the opt-in provision did not specifically make clear that U.S. EPA approval is required or that a local rule by an air district must go through the same process and have the same structure and detail as the San Joaquin Valley Air Pollution Control District Rule 9610, SIP Credit for Emission Reductions Generated through Incentive Programs (adopted by San Joaquin Valley Air Pollution Control District's Governing Board on June 20, 2013). The second U.S. EPA comment was regarding how the proposed rule incorporates the entire 2005, 2008, and 2011 Carl Moyer Guidelines by reference. U.S. EPA requested the regulation reference the specific sections of the Carl Moyer Program Guidelines that apply.

Staff has addressed both concerns. The text of the modifications to the originally proposed regulation and the incorporated documents were made available in one supplemental 15-day comment period by issuance of a "Notice of Public Availability of Modified Text ("15-day Notice") on May 14, 2014. The 15-day Notice is incorporated by reference herein. The 15-day Notice was emailed to persons generally interested in ARB's rulemaking concerning in-use off-road mobile agriculture diesel equipment. This document was also published on May 14, 2014, on ARB's Internet site: http://www.arb.ca.gov/ag/agtractor/agtractor.htm. Email messages announcing and linking to these postings were transmitted to over 5,100 parties who had subscribed to ARB's "inuseag" and "ms-mailings" List Server. The 15-day Notice gave the name, telephone, and fax number of ARB's contact person from whom interested parties could obtain the complete texts of the additional incorporated documents and the modifications to the original proposal, with all of the modifications clearly indicated. No comments were received during the 15-day public comment period.

B. NON-SUBSTANTIAL MODIFICATIONS

Staff identified the following additional non-substantive change to the regulation:

- Section 2428 (f) Recordkeeping remove “and other related requirements”

The above described modification constitutes non-substantial change to the regulatory text to improve clarity, but does not materially alter the requirements or conditions of the proposed rulemaking action.

III. DOCUMENTS INCORPORATED BY REFERENCE

The regulation and the incorporated Carl Moyer Program Guidelines adopted by the Executive Officer are incorporated by reference and links to the respective guidelines are listed below.

2011 Carl Moyer Program Guidelines, approved April 28, 2011

http://www.arb.ca.gov/msprog/moyer/guidelines/2011gl/2011cmpgl_10_30_13.pdf

2008 Carl Moyer Program Guidelines, approved March 27, 2008;

http://www.arb.ca.gov/msprog/moyer/guidelines/cmp_guidelines_part1_2.pdf
http://www.arb.ca.gov/msprog/moyer/guidelines/cmp_guidelines_part3.pdf
http://www.arb.ca.gov/msprog/moyer/guidelines/cmp_guidelines_part4.pdf

2005 Carl Moyer Program Guidelines, approved November 17, 2005

http://www.arb.ca.gov/msprog/moyer/archive/2005_Carl_Moyer_Guidelines_Part1.pdf
http://www.arb.ca.gov/msprog/moyer/archive/2005_Carl_Moyer_Guidelines_Part2.pdf
http://www.arb.ca.gov/msprog/moyer/archive/2005_Carl_Moyer_Guidelines_Part3.pdf
http://www.arb.ca.gov/msprog/moyer/archive/2005_Carl_Moyer_Guidelines_Part4.pdf

These documents were incorporated by reference because it would be cumbersome, unduly expensive, and otherwise impractical to publish them in the California Code of Regulations. Also, the incorporated documents were made available by ARB upon request during the rulemaking action and will continue to be available in the future.

IV. SUMMARY OF COMMENTS AND AGENCY RESPONSE

Written comments were received during the 45-day comment period in response to the October 25, 2013, public hearing notice, and written and oral comments were presented at the Board Hearing. Listed below are the organizations and individuals that provided comments during the 45-day comment period:

Commenter	Affiliation
Kubsh, Joseph (October 7, 2013)	Manufacturers of Emission Controls Association (MECA)
Jordan, Deborah (October 21, 2013)	U.S. Environmental Protection Agency (U.S. EPA1)
Cort, Paul (October 23, 2013)	Earthjustice (EJ)

Commenter	Affiliation
Sheikh, Samir (Oral, October 25, 2013)	San Joaquin Valley Air Pollution Control District (SJVAPCD)
Isom, Roger (Oral, October 25, 2013)	California Cotton Ginner Association/ Western Agricultural Processors Association (CCG/WA)
Magavern, Bill (Oral, October 25, 2013)	Coalition for Clean Air (CCA)

1. Comment: Manufacturers of Emission Controls Association (MECA) generally supports ARB's proposal to ensure that available incentive programs used to reduce emissions from existing mobile agricultural equipment used in California are eligible for credits within California's SIP. (MECA)

   Response: ARB staff appreciates and thanks MECA for its support.

2. Comment (multiple comments): MECA comments on the emission characteristics of future non-road engines and technologies that will be used to make them compliant with U.S. EPA Tier 4 final engine emissions certification requirements for this engine sector, which includes mobile agricultural equipment. MECA expects non-road diesel engine manufacturers to use the same technologies that have been used in the highway diesel sector to comply with U.S. EPA's 2007-2010 heavy-duty highway emission limits. These technologies include diesel particulate filters and urea-selective catalytic reduction systems for reducing particulate matter and oxides of nitrogen (NOx). However, continued development of emission reduction technologies has resulted in alternate technologies for Tier 4 final diesel non-road engines that meet particulate matter (PM) standards for some horsepower ranges without the use of a diesel particulate filter (DPF). MECA is concerned that engines certified without DPFs will experience reduced durability and increased PM emissions in the long-term.

   MECA believes ARB should closely scrutinize Tier 4 final certification packages of non-DPF diesel engines and allocate extra compliance and enforcement resources to follow up with in-use emissions testing and Tier 4 non-road engines certified without a DPF.

   MECA also believes ARB and U.S. EPA should consider adoption of a manufacturer run, in-use emissions testing program in the non-road sector that uses the latest portable emissions measurement technology to ensure Tier 4 non-road engines are meeting the Tier 4 non-road standards.

   MECA stated that the comments they had previously submitted to U.S. EPA concerning the proposed technical amendments for heavy-duty engines and vehicles and nonroad engines (this is in reference to U.S. EPA Direct Final rule and Notice of Proposed Rulemaking for Heavy-Duty engines and Vehicles, and Nonroad Technical Amendments, which were published in Volume 78, No. 116, of the Federal Register , 78 FR NO. 116, on June 17, 2013, MECA and ARB submitted comments

July 17, 2013) were mostly aligned with comments provided by ARB regarding concerns with expansion of Tier 4 Transition Program for Equipment Manufacturers and changing the federal Averaging, Banking and Trading program. (MECA)

Response: These comments regarding engine emission reduction technologies are outside the scope of the proposed regulation and therefore do not require responses. The proposed regulation is an administrative mechanism that includes programs, projects, and emission reductions that are already occurring and will continue to occur regardless of whether the proposed regulation is adopted.

A future agricultural equipment regulation is being considered in parallel with development of the 2016 SIP. This future regulation being considered may focus on emission control requirements for the agriculture sector. ARB staff encourages MECA to participate in this future regulatory process and express ideas and concerns to staff as the future regulation is being developed.

3. Comment: U.S. EPA supports the State's effort to create a mechanism pursuant to the Clean Air Act to quantify, for state implementation plan credit, emissions reductions achieved through voluntary incentive programs that accelerate the purchase of new, cleaner farm equipment meeting U.S. EPA emission standards. (U.S. EPA1)

   Response: ARB staff appreciates and thanks U.S. EPA for its support.

4. Comment: U.S. EPA also comments that it is not clear to them how ARB's proposed regulation would address the requirements of the Clean Air Act, what role it would play in a SIP and how it would "complement" San Joaquin Valley Air Pollution Control District Rule 9610. U.S. EPA looks forward to working with ARB to develop a mechanism for quantifying emission reductions from incentive programs that both complements Rule 9610 and satisfies the requirements of the Clean Air Act, including U.S. EPA's SIP completeness criteria in 40 CFR part 51, appendix V. (U.S. EPA1)

   Response: ARB appreciates U.S. EPA's comments and will work with U.S. EPA on implementing the proposed regulation to ensure the reductions from incentive programs are SIP creditable and that SIP inventory calculations meet the requirements of the Clean Air Act. The proposed regulation complements the San Joaquin Valley Air Pollution Control District Rule 9610 (District Rule) by providing an administrative mechanism for documenting the emission reductions from incentive projects directly funded by ARB, while Rule 9610 addresses local, State, and federal incentive program funding administered by the District. The proposed regulation also provides a framework for ARB review of District progress in implementing incentive programs as part of ARB's SIP oversight role. Overall, both the ARB regulation and Rule 9610 combined ensure that all SIP

creditable emission reductions from incentive funds for mobile agricultural equipment are coordinated and accounted for.

5. Comment: Earthjustice commented that the proposed regulation has no strategy for actually attaining the ozone national ambient air quality standards. The commenter believes that by approving the measure it is an unlawful accounting scheme by ARB to justify further delay of the needed emission reductions. (EJ)

   Response: ARB staff does not agree with the comment. The approved SIP for the San Joaquin Valley sets out a broad strategy to attain the national ambient air quality standard for ozone through actions to reduce emissions from many sources. Mobile agricultural equipment is one source among many addressed in the SIP. Specifically, the approved SIP includes an ARB commitment to reduce emissions from mobile agricultural equipment, including mobile agricultural equipment upgrades through incentive programs. The proposed regulation establishes an administrative framework for documenting emission reductions from mobile agricultural equipment incentive programs that are eligible for SIP credit.

6. Comment: Earthjustice believes the proposed regulation does nothing to address the pollution problem in the San Joaquin Valley and requests the Board to reject proposal. (EJ)

   Response: ARB staff does not agree with the comment. The proposed regulation establishes an administrative mechanism for emission reductions resulting from incentive program mobile agricultural equipment projects to be eligible for credit to the SIP. The incentive programs are a vital tool in encouraging fleet turnover sooner than they may have occurred under business as usual conditions.

7. Comment: Earthjustice states that ARB staff began outreach on the agricultural rule in 2012 and initially engaged discussions with regulated community describing a regulation that would impact all in-use off-road mobile agriculture equipment in the State. Earthjustice states ARB staff received pushback from agricultural representatives and rather than exploring concerns, staff's proposal is to forgo control requirements and take credit for voluntary activities already underway. (EJ)

   Response: ARB staff does not agree with comment for several reasons. As described in the staff report, ARB staff held three public workshops and toured a number of agricultural operations for the rulemaking process. In addition to staff updating the emissions inventory work, and reviewing and analyzing the cost and availability of Tier 4 technologies for mobile agricultural equipment, significant communication with the agriculture industry and stakeholders occurred. The intention at the beginning of this regulatory process was to develop one regulation that would meet the 2007 SIP emission reduction goal for 2017 and attainment of the 1997 ozone standard by 2023, while also addressing the actions required to meet the new, more stringent 8-hour ozone standard by 2032.

However, due to flexibilities and emission credit banking provisions available to the engine manufacturers and Original Equipment Manufacturers to allow for delayed production and introduction of the cleanest Tier 4 final engines technologies, a two-step regulatory process was needed to ensure SIP credit for voluntary incentive program mobile agricultural projects in the near-term (this regulation) and a long–term effort to accelerate the use of Tier 4 equipment. Staff found that incentives programs helped facilitate the turnover of mobile agricultural fleets in the San Joaquin Valley and that emission reductions resulting from these efforts would meet the 2007 SIP emission reduction goal for this sector if the reductions could receive proper SIP credit. Thus, the need to focus the proposed regulation effort on developing an administrative mechanism to allow these reductions to be eligible for SIP credit.

A future regulation is currently being considered in parallel with development of the 2016 SIP. This future regulation may focus on control requirements for this sector. ARB staff encourages Earthjustice to participate in this regulatory development process and express ideas and concerns to staff as the future regulation is developed.

8. Comment: Earthjustice states that the Clean Air Act does not allow SIP credits for unenforceable measures and there has been no determination that these programs satisfy the Clean Air Act's requirements for enforceable emission reductions and this has not been demonstrated in the staff report. (EJ)

   Response: ARB staff does not agree with this comment. California's Carl Moyer Program, active since 1998, is a mature program with robust implementation guidelines and a long-track record of achieving emission reductions and providing a framework for appropriate enforcement. The proposed regulation focuses on incentive-funded mobile agricultural equipment projects that are implemented following the Carl Moyer Program Guidelines.

   The Carl Moyer Program Guidelines have stringent requirements in place to ensure that the emission reductions from projects funded under the program are enforceable. Enforcement of the Carl Moyer Program has been demonstrated in audits conducted by the San Joaquin Valley Air Pollution Control District, ARB, the Department of Finance, and the Bureau of State Audits. The proposed regulation provides the administrative mechanism to credit the resulting emission reductions within the SIP.

9. Comment: Earthjustice states that ARB staff's rationale for the proposed regulation is misleading and flawed because there is no basis for staff's position that if the incentive program approach is not approved California would need to adopt additional regulations at a significant cost to businesses. The commenter also states that an assessment of costs cannot be made without regulation specifics. (EJ)

Response: ARB staff does not agree with the comment for several reasons. The proposed regulation establishes an administrative mechanism for emission reductions resulting from incentive program mobile agricultural equipment projects to be eligible for credit to the SIP. ARB staff estimates these reductions will meet the 2007 SIP goal for NOx reductions of 5 to 10 tons per day from mobile agricultural equipment in the San Joaquin Valley. Because this regulation does not require turnover of equipment, an assessment of the costs to turn over the mobile agricultural equipment was not necessary. Without this regulation, however, it would be necessary to impose an equipment turnover regulation now to meet the 2007 SIP goal. Such a regulation would result in a primarily Tier 3 fleet that will not provide the emission reductions necessary to meet ambient air quality ozone standards by the 2023 and 2032 attainment dates. The Tier 4 final equipment that will move the fleet towards those standards will not be widely available for the entire mobile agricultural equipment sector until the 2020 timeframe. Therefore, without this regulation the fleet would be required to turnover twice at significant additional cost when compared to one turnover at a later time. ARB is considering development of a regulation that addresses the 2023 and 2032 attainment dates and takes into account the availability of the Tier 4 final equipment in 2020.

10. Comment: Earthjustice also notes that there is no material or data provided that allows calculation of the staff estimated 5 to 10 tons per day of NOx reductions from mobile agricultural equipment incentive programs. The commenter asserts that these air quality improvements are misleading and false because the regulation does not increase incentive funding nor does it alter the incentive of individual farmer to participate in the program. (EJ)

    Response: Since 2007, local, State, and federal funds have replaced over 3,000 old, higher polluting off-road mobile agricultural equipment with Tier 3 or cleaner mobile agricultural equipment in the San Joaquin Valley. As part of San Joaquin Valley Air Pollution Control District Rule 9610, all incentive project data and materials must be included in an annual demonstration report and submitted to ARB and U.S. EPA by August 31 of each year. San Joaquin Valley Air Pollution Control District's annual demonstration report provides this data to the public on their website (link to the website: http://www.valleyair.org/MOP/mop9610_idx.htm). ARB staff's initial estimate~~s~~ of a minimum of 5 to 10 tons per day of NOx emissions reductions from mobile agricultural equipment was based on the combination of the data provided by the San Joaquin Valley Air Pollution Control District in its annual demonstration report for its projects already paid for and expected continued funding for local, State, and federal incentive programs.

    The commenter is correct that this proposed regulation does not directly increase incentive funding nor does it alter the incentive of individual farmers to participate in incentive programs. The proposed regulation only establishes an administrative framework for documenting emission reductions from mobile

agricultural equipment incentive programs that are eligible for SIP credit. The regulation is not the implementation mechanism for the incentive program and therefore does not govern incentive funding amounts or individual farmer incentives. Staff believes that farmers will continue to participate in the aforementioned incentive programs not only because these projects result in fewer emissions from their in-use mobile agricultural equipment, but with adoption of both San Joaquin Valley Air Pollution Control District Rule 9610 and this proposed regulation, the emission reductions will also be eligible for SIP credit and therefore encourage the continuing availability of local, State, and federal incentives.

11. Comment: Earthjustice states the staff report uses careful (and misleading) language suggesting that Tier 4 equipment will not be introduced for "all" mobile agricultural equipment applications, or Tier 4 equipment will not be "widely available" or available for "all" power categories until 2020. Commenter states an analysis should explore the status of Tier 4 tractors of various sizes and suggests that requirements can be targeted to the largest categories. The notion that equipment might not be "widely available" is irrelevant; if the market for the equipment is in the Valley, then that is where the equipment will be made available. (EJ)

    Response: These comments are outside the scope of the proposed regulation for "State Implementation Plan Credit from Mobile Agricultural Equipment" and therefore no responses are required.

    The proposed regulation is an administrative mechanism that concerns programs, projects, and emission reductions that are already occurring and will continue to occur regardless of whether the proposed regulation is adopted. In the future mobile agricultural equipment regulation process under consideration, ARB staff will meet with stakeholders. Staff encourages Earthjustice to be part of the process and to provide their ideas and concerns.

12. Comment: Earthjustice states that, with this rule, ARB staff breaks a promise from the 2007 SIP to regulate the agriculture community. Earthjustice also does not have confidence that the promise for the future-phase regulation will provide a different result. The commenter asserts that this delay has health consequences for the already hard-hit communities and farmworkers in the Valley and that staff has not explored or acknowledged the consequences of delay. (EJ)

    Response: ARB staff does not agree with the comment. The proposed regulation ensures that ARB will meet the 2007 SIP commitment to bring to the Board a measure for mobile agricultural equipment in the San Joaquin Valley. The proposed regulation provides an administrative mechanism to make emission reductions from mobile agricultural equipment incentive programs in the San Joaquin Valley eligible for SIP credit. A future regulation is being considered to accelerate the introduction of Tier 4 engines into the mobile agricultural

equipment fleet in the San Joaquin Valley. Staff encourages Earthjustice to be part of the process and to provide their ideas and concerns.

13. Comment: Mr. Sheikh of the San Joaquin Valley Air Pollution Control District expressed gratitude to ARB staff who has worked closely with the San Joaquin Valley Air Pollution Control District to bring these measures to the board. He stated the Statement of Principles and MOU signed in December 2010 launched the effort to establish a mechanism to ensure voluntary incentive programs are fully recognized in the SIP process. He also said that enforceability has been a concern and staff can attest that the reductions achieved are real and the projects are monitored. There have been over $300 million dollars of public and private funds. He said his district is committed to continue incentive funding and looks forward to working with staff on the future regulation. (SJVAPCD)

    Response: ARB staff appreciates and thanks the San Joaquin Valley Air Pollution Control District for its support.

14. Comment: Mr. Isom of California Cotton Ginner Association/ Western Agricultural Processors Association (CCG/WA) expressed his support of the proposed regulation. He stated that incentive programs are not only important but also necessary; agriculture cannot pass on cost of compliance, they have to absorb 100 percent of the costs. Mr. Isom stated that by the end of this year the agriculture community will not only meet the 5 to 10 tons per day emission reduction goal, but will exceed it. The CCG/WA plans to lobby at the federal level so the new Farm Bill will continue their portion of incentive funding for mobile agricultural equipment in the San Joaquin Valley. He also stated that their industry is going after things the construction rule would not, they are trying to clean up equipment that would typically be exempt. As an example of these efforts, Mr. Isom referred to a recent successful project in the San Joaquin Valley for a transfer of engines, a prototype for trading up to a higher tier, less polluting tractor by someone who is destroying an uncontrolled, high polluting tractor. (CCG/WA)

    Response: ARB staff appreciates and thanks CCG/WA for its support. ARB staff also encourages their participation in the future regulation being considered for mobile agricultural equipment.

15. Comment: Mr. Magavern provided testimony on behalf of Coalition for Clean Air (CCA). He stated his organization joined in with other groups to comment with Earthjustice on their concerns about air quality in the San Joaquin Valley. He stated that voluntary incentives alone are not sufficient to achieve the air quality improvements from the agriculture sector. People living in San Joaquin Valley are suffering from the poor air quality. Asthma rates are at 17 percent (higher in some populations). The San Joaquin Valley is one of two of the worst polluted areas in the country. While they support the Moyer Program as part of the solution, it needs to

be coupled with binding standards. He believes the approach taken today is legally suspect and does not meet requirements under the Clean Air Act. In addition to the incentive programs, a regulation is needed. He also stated that the staff proposal presents conclusion but not data to support the conclusions and asked the Board to reject the proposed regulation and direct staff to come back with a regulatory proposal. (CCA)

Response: ARB staff does not agree with the comment and wants to clarify that the 2007 SIP measure and the staff report for this proposed regulation describes the technology issues faced by the agriculture equipment users, primarily the timing of the availability of Tier 4 final engines. Staff estimates they will be widely available in all mobile agriculture equipment in the 2020 timeframe The proposed regulation acknowledges the cooperation between the San Joaquin Valley Air Pollution Control District, U.S. Department of Agriculture Natural Resources Conservation Service, ARB and the farming community to accelerate fleet turnover. Staff is currently considering a future mobile agricultural regulation to address air quality needs for 2023 and 2032. ARB staff encourages the participation of CCA in this development process.